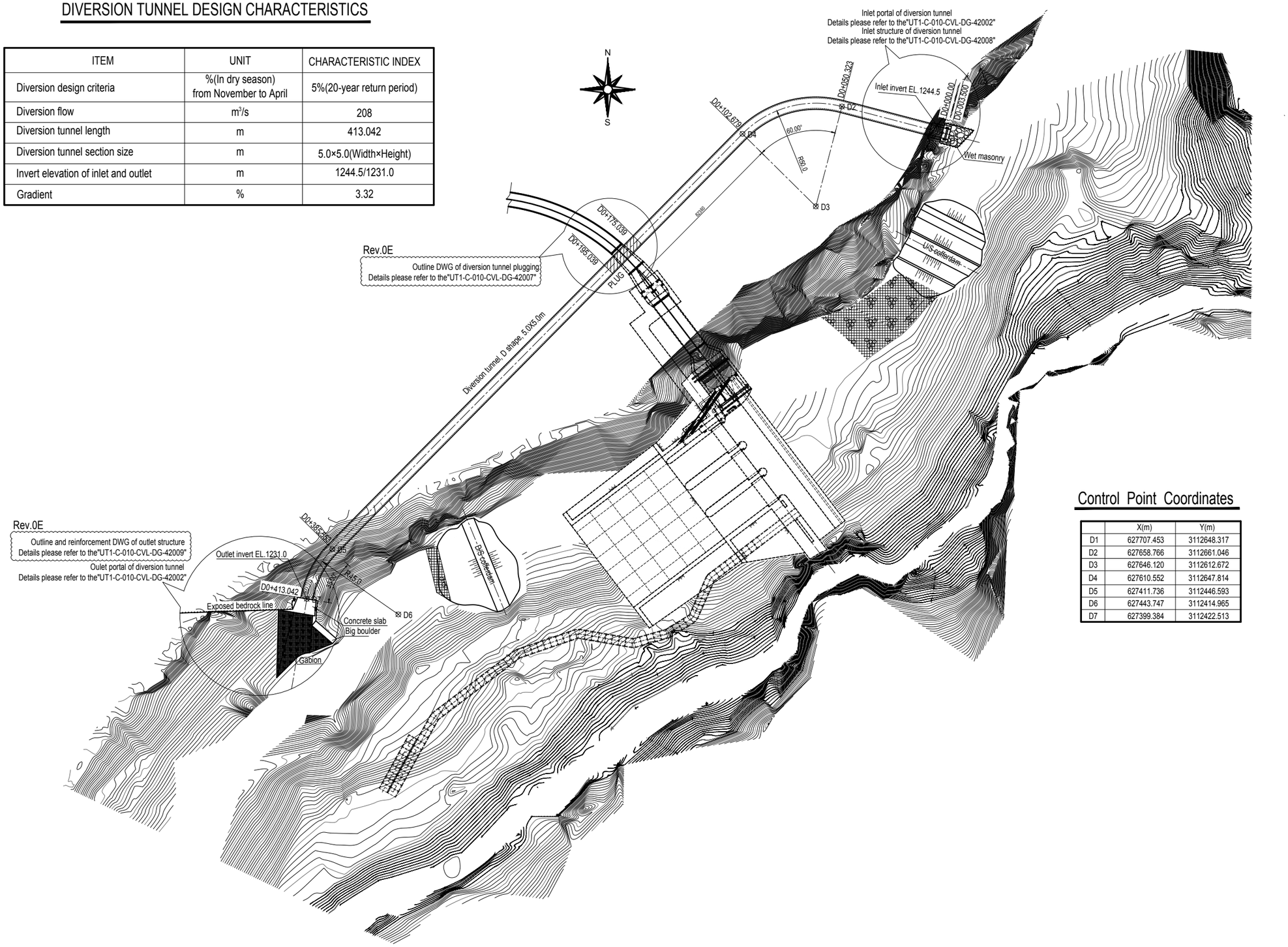
General Plan of Diversion Tunnel

Scale 1:1000

DIVERSION TUNNEL DESIGN CHARACTERISTICS

ITEM	UNIT	CHARACTERISTIC INDEX
Diversion design criteria	%(In dry season) from November to April	5%(20-year return period)
Diversion flow	m^3/s	208
Diversion tunnel length	m	413.042
Diversion tunnel section size	m	5.0×5.0(Width×Height)
Invert elevation of inlet and outlet	m	1244.5/1231.0
Gradient	%	3.32



Control Point Coordinates

	X(m)	Y(m)
D1	627707.453	3112648.317
D2	627658.766	3112661.046
D3	627646.120	3112612.672
D4	627610.552	3112647.814
D5	627411.736	3112446.593
D6	627443.747	3112414.965
D7	627399.384	3112422.513

1:1000 0 10 20 30 40 50m

NOTE

1.Elavations, chainages are measured in meter, dimensions are in millimeter unless otherwise stated.
2.Structures shown on the drawing with the exception of diversion tunnel are sketches only.

REFERENCE DRAWINGS

UT1-C-010-CVL-DG-42002	Excavation and Support Drawing of Inlet and Outlet Portal of Diversion Tunnel
UT1-C-010-CVL-DG-42003	Excavaiton and Initial Support Drawing of Diversion Tunnel
UT1-C-010-CVL-DG-42008	Diversion Facilities Outline of Diversion Tunnel Intake Tower
UT1-C-010-CVL-DG-42007	Diversion Facilities Outline Drawing of diversion tunnel plugging
UT1-C-010-CVL-DG-42009	Diversion Facilities Outline and reinforcement DWG of outlet structure

SYMBOL AND LEGEND Rev.0E

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REV. NO.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
0E	14.MAY.2022	As RN-0113	DONG Z.Z.	K.J.KIM	Y.S.SON
0D	12.APR.2022	As RN-0082	DONG Z.Z.	K.J.KIM	Y.S.SON
0C	20.JAN.2022	As RN-0042	DONG Z.Z.	K.J.KIM	Y.S.SON
0B	31.DEC.2021	Second issue	DONG Z.Z.	K.J.KIM	Y.S.SON
0A	25.DEC.2021	First issue	DONG Z.Z.	K.J.KIM	Y.S.SON

PROJECT TITLE
Upper Trishuli-1 HEP (216MW)

OWNER
NWEDC NEPAL WATER AND ENERGY DEVELOPMENT CO. PVT. LTD.

OWNER'S ENGINEER
TRACTEBEL ENGIE jade CONSULT

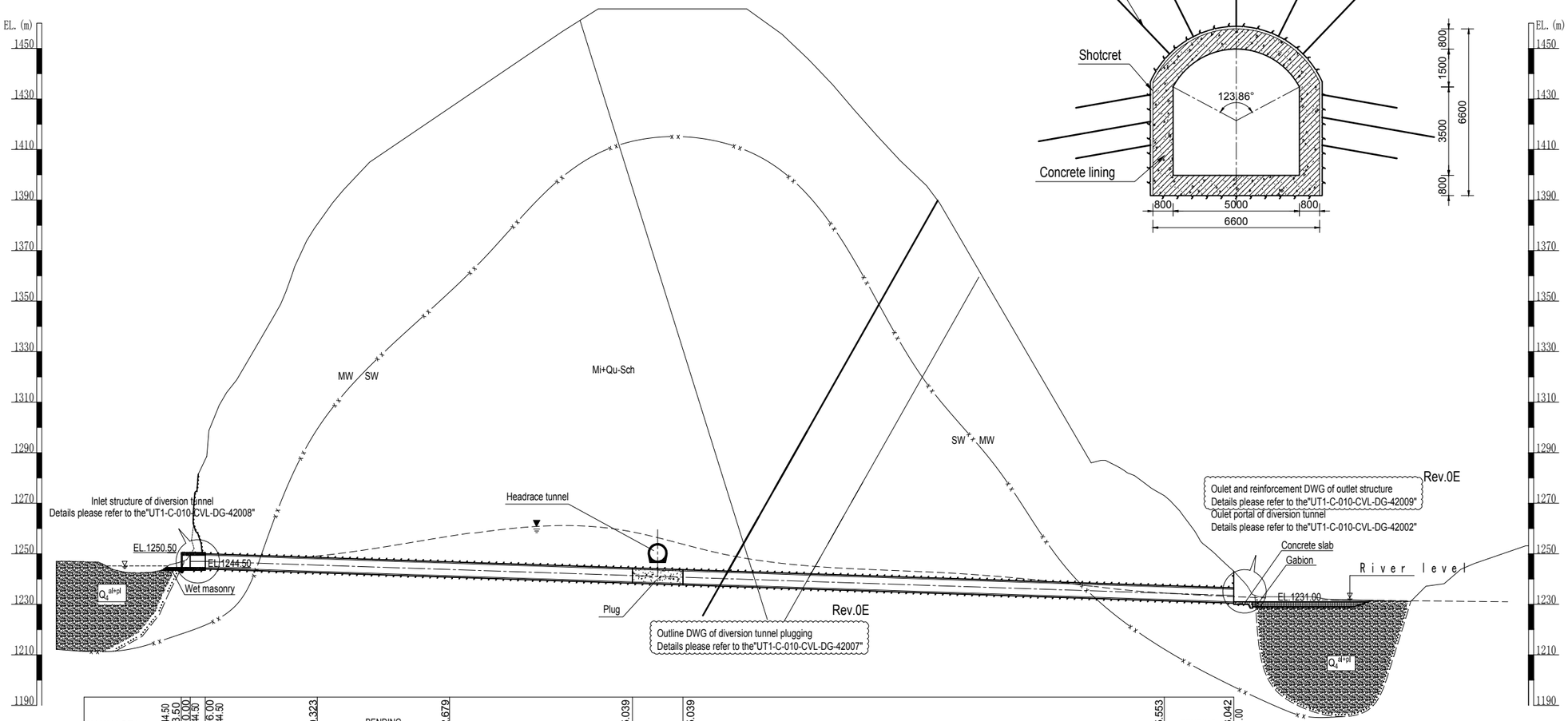
CONTRACTOR
DOOSAN Enerbility

DRAWING TITLE
DIVERSION FACILITIES
ARRANGEMENT DRAWING OF DIVERSION TUNNEL(1/2)

INDEX	DRAWING NUMBER	SHEET NO.	REV. NO.
	UT1-C-010-CVL-DG-42001-1	1 OF 2	0E

Longitudinal Profile of Diversion Tunnel

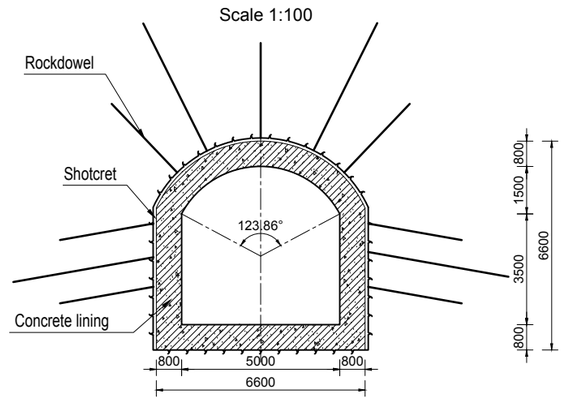
Scale 1:1000



CHAINAGE(m)	EL.1244.50	D0-003.50	D0+000.00	EL.1244.50	D0+006.00	EL.1244.50	D0+050.323	BENDING SECTION	D0+102.679	D0+175.039	PLUG	D0+195.039	D0+385.553	BENDING SECTION	D0+413.042	EL.1231.00
Gradient			0%								3.32%					
Rock class type	III				III~II					IV		III			IV	
Overburden thickness(m)							149.60			222.37	218.22		64.60		6.6	

Typical Section of Intersection of Headrace and Diversion Tunnel

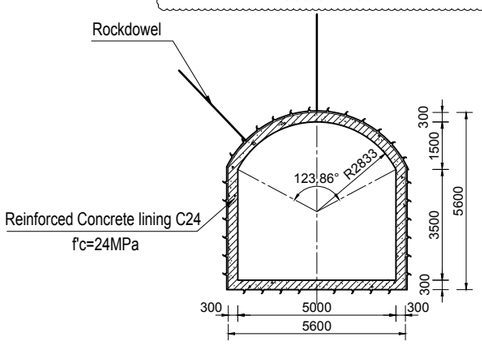
Scale 1:100



Typical Section of II

Rev.0E

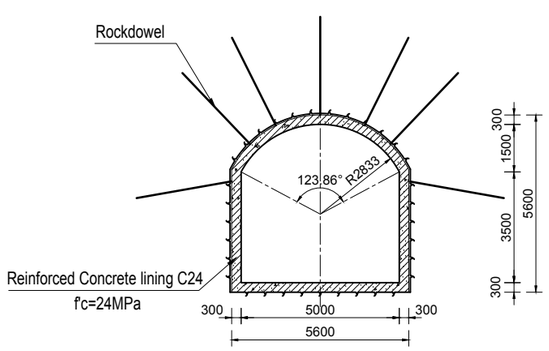
Scale 1:100



Typical Section of III

Rev.0E

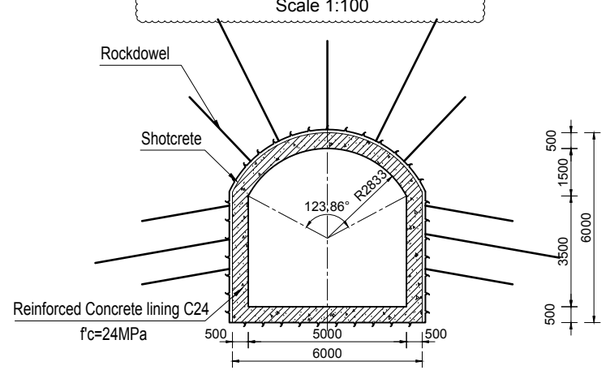
Scale 1:100



Typical Section of IV

Rev.0E

Scale 1:100



1:1000 0 10 20 30 40 50m

1:100 0 1 2 3 4 5m

NOTE

1. Elavations, chainages are measured in meter, dimensions are in millimeter unless otherwise stated.
2. Details of surrounding rock support and lining of each rock mass grade refer to subsequent drawings.
3. The distribution of rock classes is tentative.

REFERENCE DRAWINGS

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CONTRACTOR

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DRAWING TITLE

DIVERSION FACILITIES
ARRANGEMENT DRAWING OF DIVERSION TUNNEL(2/2)

INDEX	DRAWING NUMBER	SHEET NO.	REV. NO.
	UT1-C-010-CVL-DG-42001-2	2 OF 2	0E